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Curriculum Research in the Netherlands

Willem Wardekker, Monique Volman, and Jan Terwel

Introduction: Conditions in the Netherlands

Although the Netherlands are wedged between the spheres of influence, both in a political and in a philosophical sense, of the Continental (both German and French) and Anglo-Saxon worlds, a space for some specific developments in and interpretations of education that are unique to the Netherlands has existed most of the time. The history and present state of its school system, the curriculum, and curriculum theory and research are all closely connected to the waxing and waning of these spheres as they came to dominance, but they cannot be understood if we do not take into account some specific characteristics of the Dutch "mind set" and the solutions and structures to which it gave rise.

As in most European countries, the school system in the Netherlands developed to meet the needs of a shifting social order. This could be described as a process of "massification" of education: more and more people gained admission to formal education, until compulsory enrolment for all was reached as late as 1920. It may be interesting to note right away that the dependence of the country on foreign trade has lead to an important amount of curriculum time being devoted to foreign languages, while nationalist tendencies both in the curriculum and in the general way of thinking are rather less marked than in most other countries. It is unclear whether the fact that the Netherlands cannot boast of many "great names" in philosophy or the humanities (Nauta 2000) should be seen as a consequence or a cause of this situation. Dutch thinkers seem to have engaged mainly in connecting and "trading" in ideas developed elsewhere. This commercial background may also be a reason why conflicts of interest tend to be solved by pragmatic compromise rather than by open conflict, a tendency which has also left its traces in the school system and in educational theory. Such conflicts have existed between social classes or strata, but also, more markedly than in other countries, between religious groups. A description in terms of massification of education tends to hide such conflicts of interest and their solutions.

As to social conflict, each time a new social group emancipated itself and demanded admission to the structure, a new school type in secondary education was added instead of changing the curriculum of the existing schools. Ostensibly, the purpose of this was to be able to cater to the specific needs of such groups. Thus, for instance, in the second half of the nineteenth century, the HBS ("Higher Citizens' School") was formed next to the Gymnasium, addressing itself to the children of the higher middle class and providing a curriculum inspired mainly by the needs of commerce. But the idea of creating special schools for special needs may also be viewed as an ideology that hides the purpose of maintaining the class structure of society against the dangers that this emancipation process presented. The net result has been a rather rigid structure with many types of schools in secondary education, the boundaries between which are difficult to pass for pupils. And even though Dutch society is much less class-oriented than, for example, the British, it is still true that enrolment in these school types is class related. The most important feature of this system was until very recently a strict separation in secondary education between schools for general education and schools for industry-oriented vocational training. This separation grew historically from the development of different education systems and is thus class-related, but was (and still is) "legitimized" by an ideology of separate student abilities: some students are supposedly better with their heads, others with their hands.

These nineteenth-century developments have also left their mark on the curriculum. According to Lenders (1988, 1992), the orientation toward commerce and industry coupled with a dominant liberalism translated itself into an empiricist and even positivist curriculum, in which

knowledge and abilities were valued more than personality development, the latter being seen as an area belonging to the family and the church rather than the school. This empiricist curriculum became the factual norm both in primary and in secondary education. The position of the neo-humanist Gymnasium, for instance, became quickly marginalized once the more empiricist HBS curriculum (and others like it) was established.

The history of the Dutch school system and its curriculum is at least as much one of religious conflicts and the emancipation of religious groups as it is one of class conflicts and emancipation. This element has had important consequences in the second half of the nineteenth century and throughout the twentieth century.

Protestants and Catholics each comprise about one third of the Dutch population, and each group traditionally has created its own organizations for just about every aspect of public life: the struggle for emancipation and power of each group resulted in a sort of voluntary religious apartheid system (Sturm et al. 1998) that has only begun to break down with the growing secularization in the second half of the twentieth century. Of course, each group claimed the right to decide the content of the curriculum of its children; after a prolonged conflict, the issue was settled by creating the statutory right for any group to found its own schools, which are fully state-financed as long as they conform to certain criteria of quality and number of pupils. Most of these schools (now about 60% of all schools) are of an either Catholic or Protestant signature; the state itself provides schools only in those cases where this system does not suffice, and these "public" schools form the third "pillar" in this system of what is commonly called "pillarization," (also known as the silo effect), recruit their students from social democrats and conservatives alike. (One of the unforeseen consequences of this system has been that it is now being used, for example, to found state-financed Islamic or Hindu schools.)

The consequences of this model have been different from what one might expect. Apart from obvious differences in religious education as a subject, the impact on the actual curriculum is very limited. The dominance of an empiricist tradition has largely prevented thinking in other terms than those of the transmission of objective knowledge. Neither group has succeeded in creating a curriculum that is inherently Catholic or Protestant in nature. In fact, the curricula (both formal and informal) in all three "denominational streams" are largely the same—the more so as schools that have a religious background admit pupils, and often teachers as well, who do not have the same background, and the importance attached to religion as a dominating aspect of life is diminishing anyway. This is now leading to a situation where parents, irrespective of their religious background, choose the "best" school for their children, a practice which tends to emphasize class and ethnic differences. But from the point of view of curriculum theory, the most important consequence of the so-called "freedom of education" is that the state cannot prescribe detailed curricula or textbooks, as this is quickly interpreted as state interference in private matters. Schools are largely autonomous in their choice of source books, marketed by independent commercial publishers (originally catering each to their own 'pillar') or even created by the teachers themselves. There is a state institute for curriculum development (SLO), but its influence is limited to creating "example curricula" with no binding power. Although in recent years SLO has gained influence by coordinating and directing the processes of deliberation concerning the national curriculum within and between the various interest groups, the educational publishing houses have not lost their position of power.

Because of the relative autonomy of schools, the margin for curriculum changes imposed by the state is relatively small. Based on the fact, however, that schools in all three "pillars" are fully financed by the state, the right to assess the quality of education is claimed by the state, and it exercises this right by imposing central examinations in secondary education and an inspection system at all levels. Some major changes in the curriculum have been imposed by changing the content of the examinations. In addition, the national curricula and goals are evaluated by the National Institute for Educational Testing (CITO). Both CITO and SLO are instrumental in an educational policy towards accountability. Still, the space for curriculum change initiated in the schools themselves is much greater than in countries with a more centralized curriculum; given the uncoordinated nature of such efforts, coupled with the rather conservative policies of publishers, this may have resulted in a rather slow rate of change.

The relative autonomy of schools and the relative ease of founding state-financed schools, even if they are not religious in character, have also created the possibility for the success of several strands of the Progressive Education movement in the Netherlands. In the beginning of the twentieth century, these began as isolated initiatives, sometimes inspired by internationally recognized practical efforts like those of Montessori (who lived in the Netherlands for some time), Petersen, Freinet, Steiner, and Helen Parkhurst, and sometimes founded by more nationally known educators like Boeke and Ligthart. Such initiatives were often dependent on one person's special charisma; but the "freedom of education" made it relatively easy to continue these efforts. Even now, the number of Montessori, Jenaplan, and Waldorf schools is still growing, and "progressive" ideas have had a distinct impact on the pedagogy of "normal" schools. The actual influence on the pupils' curriculum of these movements is much greater than that of the religious affiliation of schools.

It would seem that at the moment, the position of the state relative to that of the schools is shifting. This shift may be partly caused by the growing disinterest in a religion-based school system; partly also, the rising costs of education have resulted in drastic budget reductions (to the point where the Netherlands is now spending a smaller portion of its national income on education than most

other Western countries) accompanied by the requirement of the schools to present themselves in an open market and be accountable for their results; and partly, finally, by the problems created by the relatively large influx of non-Dutch-speaking pupils, which is seen as a threat to quality. On the one hand, schools are nominally being given even more (financial) freedom to realize a distinct "mission"; on the other hand, the state is exerting more control than ever by taking measures to "ensure the quality of education." These take the form of imposing regulations that have a direct impact on the aims and content of the curriculum. One example of this tendency is the formulation of mandatory curriculum aims for primary and lower secondary education; although at the moment these are little more than a collection of rather loosely formulated and incoherent descriptions of subject areas to be covered, it is a clear break with the tradition of non-intervention in the curriculum. Another example is the compulsory introduction of a pedagogy based on principles of self-regulated learning in the second phase of secondary education at the end of the 1990s. Here too, the basic principles were rather loosely formulated and schools could implement these in very diverse forms of actual curriculum; at the same time, such an intervention would probably have met with insurmountable resistance twenty years ago.

And this is what happened after all. Both self-regulated learning and the role the state had played in introducing a particular pedagogy came under heavy critique, among others from a Parliament inquiry committee. This coincided with and was partly inspired by concern about the declining quality of Dutch education, which was assumed to be obvious when the position of the Netherlands in the PISA ratings dropped. The wish to play an important part in a worldwide knowledge economy was then (erroneously in our view, cf. Guile 2010) translated into an almost exclusive emphasis on learning Dutch, English, and math. In the first decade of the twenty-first century, spurred by the economic crisis, this led to an ever increasing emphasis on a narrowly conceived form of accountability, enforced by the inspectorate and backed by politics. Beginning in general secondary education, this tendency is now also very visible in primary education.

The Struggle for a Common Curriculum in Secondary Education The history of Dutch education in the second half of the twentieth century was marked by a struggle to get rid of the more problematic aspects of the school system as it had developed in the past, exactly because the state had limited power over the curriculum. The aim was to abolish the institutionalized form of curriculum tracking and to create a more meritocratic form of education. Students in the Netherlands were (and still are) selected at the age of 12 years for separate curriculum tracks and schools. Most attempts to change this concentrated on changing the structure of the system, diffusing or eliminating the boundaries between school types. None of these attempts has fully succeeded, partly because of the resistance of conservative political forces and partly because of the inherent resilience of the system, which, in the Netherlands, may be greater than in some other countries because of the limited power of the state over the curriculum. The latest example was the creation of a common curriculum in the first two or three years of secondary education in 1993, which was abandoned again in 2004, and which we now go into in more detail.

Both developments in society and notions of social justice and equality of opportunity in education were important motives for curriculum innovation in the first stage of secondary education. In the Netherlands, it was Leon van Gelder, professor of education at Groningen University from 1964 to 1981, who was one of the proponents of a radical innovation of the first stage of secondary schooling in the Netherlands. In the sixties and seventies, he proposed a new curriculum for all 12 to 16-year-olds. The resulting concept of a comprehensive school (Middle School) was inspired by similar innovations in Sweden, England, and Germany. Some of the European scholars who inspired this innovation were Bernstein and Klafki. In the seventies, when the social democrats became a coalition partner in the Dutch government, plans were launched and experiments were initiated to design and implement the Middle School. One of the main issues was to overcome the traditional division between general education and vocational education and the accompanying system of curriculum tracking between and within schools.

The curricular innovations in the Middle School experiments were supported by the National Institute for Curriculum Development (SLO). However, the main burden of the development of new curriculum materials was on the teachers. This included integrating subjects into broader curriculum domains; connecting teaching and learning to real-life situations; integrating the cognitive, affective, and psycho-motor dimensions of learning; and students of different abilities working together in heterogeneous classes and small groups.

As soon as a new conservative minister of education was in charge, the experiments gradually lost their political legitimation and support and were finally abandoned. It was to take more than 15 years before a political consensus could be found for a new secondary curriculum. At the start of the school year 1993–1994, a major innovation was introduced for the first stage of Dutch secondary education. All students were to participate in a national core curriculum called "*basisvorming*" ("basic education"). The new curriculum contained common objectives for 15 subjects, to be covered in three years with some differentiation in time for high and low achieving students in the various streams but without any changes to the existing structure, with its heavy emphasis on external differentiation. In the core curriculum new subjects, aims, and classroom procedures were formulated. Some of the elements of the new curriculum were also part of the Middle School curriculum, like learning in real-life situations and integrating the cognitive, affective, and psycho-motor

dimensions. More or less new were the accentuation of skills and cognitive strategies and a new role of the teacher in guiding students in the process of re-invention instead of whole-class teaching from a transmission perspective. The development of learning strategies and of self-regulated learning was a central goal, seen as a longitudinal process to be fostered both in the junior level and the senior level of secondary education.

The new curriculum marked a change in outlook from the Middle School ideas: there, a way of thinking inspired by Progressive educators was plainly visible; here, the perceived demands of a market economy lead to a greater emphasis on qualification, whereas the Progressive element was visible only in some of the arguments for self-regulated learning. And even those elements soon disappeared, after self-regulated learning came under critique, as was shown in the previous section. Also, the idea of common objectives for lower secondary education was abandoned after 10 years, and the necessity to tailor the curriculum to the needs of students of different achievement levels was emphasized again. However, a curriculum based on hands-on learning in authentic situations has taken root in secondary vocational education, where it has led to quite extensive reconstruction of the actual curriculum.

The peculiarities of the Dutch system (of which the foregoing was only one example) will have to be kept in mind when, in the next sections, we will go into a description of the history and present situation of curriculum theory, research, and development in the Netherlands.

The First Wave of Curriculum Theory: Empiricism and Theology In the nineteenth century, curriculum theory in the Netherlands was not established in the universities. Rather, those concerned with the curriculum were school inspectors, school leaders, and teachers (Lenders 1992). It was they who wrote instruction books for teacher training, materials for (mostly primary) education, and articles in education journals. As we noted in the first section, their dominant outlook, especially in the second half of the nineteenth century, was empirist, or even empiricist. This led them to value direct experience and inquiry, which was a marked improvement on the book knowledge-oriented curriculum that was dominant until then. According to Lenders, they had a lot of direct influence on the actual curriculum. At the end of the nineteenth century, their position culminated in adopting the psychological and didactical ideas of the Neo-Herbartians based on association psychology. This resulted in a quite formal and uniform outlook on the curriculum, in which the three "stages of learning" need to be exactly passed through, and direct experience was replaced by carefully restructured and re-presented curriculum contents. It was this formal and methodical type of teaching/learning process which around 1900 became dominant at the same time that it was criticized by the proponents of Progressive education. However, as noted before, the influence of the latter was initially limited to isolated schools, and the majority of schools continued in the "old" way.

In the beginning of the twentieth century, thinking about education obtained a stronghold in the universities. This was not a direct continuation of the work of the school inspectors and leaders noted above; rather, their work was largely disregarded. Instead, it took the form of "normative pedagogy," a form of philosophy that concentrated on developing aims for education from a strictly normative (mostly Protestant Christian) perspective. Its proponents, like Gunning, Waterink, Casimir, Perquin, and Hoogveld, who had a background in theology or philosophy, saw schools above all as a specialized extension of family education, where character education in obedience to God's laws was the ultimate goal. Thus, their actual work was in creating an apology for the religion-based divisions in the school system, not primarily making a contribution to greater effectiveness or more relevant content of the curriculum, as was the tendency in Northern American curriculum thinking in the same period. Consequently, their influence on the curriculum was limited, and in this period, the actual curriculum in the schools was still mainly inspired by neo-Herbartian psychology.

The Heyday of Idealism The focus of curriculum theory changed around 1940, partly because of the pressure for "objectivity" exerted on the newly founded academic discipline, helped later by a growing secularization in society. Thus, from about 1940 to 1970, curriculum theory in the universities was dominated by a Dutch adaptation of the religiously more neutral, neo-humanist, and idealist German philosophy of the *Geisteswissenschaftliche Pädagogik,* a term chosen to denote that its methods were inspired by those of the humanities rather than by natural science. It was based in part on the philosophical ideas of Hegel, and thus shares some of its sources with the theories of John Dewey and of Lev Vygotsky (although at the time, Dewey was viewed mainly negatively in the Netherlands, and Vygotsky was virtually unknown outside the Soviet Union). Its main category is the concept of Bildung, which is most aptly described as a transformation (as opposed to transmission) model of learning (Jackson 1986). Learning, to this theory, is not a purely cognitive process. Rather, by being submerged (via the curriculum contents) in the wealth of culture (seen by Hegel as the manifestation of the unfolding Geist of humanity), the pupil's whole personality is transformed and "civilized." Curriculum subjects were supposed to have a particular motivating and civilizing power (*Bildungsgehalt*); a great deal of the efforts of this paradigm's curriculum theory was directed at finding the best possible ways of identifying, selecting, and representing elements of the academic disciplines (with an emphasis on the humanities) that have a strong *Bildungsgehalt* (cf. Westbury et al. 2000).[1]

In the same period, the more practice-oriented work of the progressive education movement (known here under its German-oriented name of Reformpedagogiek) did have

a lot of impact. No wonder, then, that the most important educational theorist of the time, Langeveld, tried to integrate the "child centered approach" of these educators with the more "content-centered approach" of the *Bildung* theory. This approach led him to conceive of the school as the child's way (curriculum) through educational experiences, as expressed in the title of one of his works, originally written in German: "*Die Schule als Weg des Kindes*" (*The School as the Way of the Child,* 1960).

Langeveld's work resonated with some of the other education professors, especially in the Catholic "pillar" (Perquin), who went from a normative view to a more humanist and ecumenical view, in which responsibility, conscience, and inner resilience were seen as more important goals of education than willingness to observe traditional values or acquiring knowledge and skills (Bos 2011). This may have created a breeding ground for the later popularity of self-regulated learning, to which we will return shortly. The direct practical impact of this work on education, however, was rather small, due partly to its high level of abstraction and partly to the strong influence that the transmission-oriented theories of the neo-Herbartians still had. Thinking in terms of transformation did not fit well into the ways of thinking about education that had become common sense.

Langeveld's work became well known, as it was obligatory material in teacher education till well into the eighties. However, it failed to change the curriculum; its impact was largely limited to creating an awareness of the need to pay attention to the personality development of children. But, quite contrary to Langeveld's intentions, in common educational thinking this has been translated into the idea of a dual task of the school: both an instructional task and a developmental ("pedagogical") task need to be fulfilled, with possible conflicts between the two normally "solved" in favor of the instructional task. One reason for this unintended interpretation was the influence of the empirically oriented "new" curriculum theory, to be treated below, in which questions of norms and personality are viewed as bordering on the unscientific; another may be that Langeveld had little to offer in terms of the selection of curriculum content or of the management of teaching-learning situations. For him, as for a number of his contemporaries like Stellwag and for later defenders of this position like Lea Dasberg, the supposedly universal qualities of culture as represented in the material of curriculum subjects remain the source of transformation to be effected in the pupils. Dasberg (1996), for instance, relates a number of curriculum subjects directly to five "essences of being human" (collective memory, morality, language, critical power, and creativity), so that these subjects should never be removed from the curriculum, while other subjects, related more to the "current needs of society," are seen as less important and more subject to change. To many, such a position seems to lead toward a singularly detached curriculum that has difficulties in meeting the concrete needs of contemporary society.

A remedy for this was proposed in 1969 by Jacob Bijl, a student and colleague of Langeveld. He suggested founding the curriculum in an analysis of life tasks, such as being a member of a religious community, of a family, of a society, and of a profession. This was a clear break with the idea of a curriculum based on academic subjects. Superficially, his proposal may look like that of the American educationist Bobbitt (1918); but where Bobbitt's intention was to analyze the exact cognitive qualities necessary to fulfill exact tasks, Bijl was thinking in terms of the personality transformations necessary to be a member of such communities.

The Turn Toward an Empirical and Constructive View

Although elements of his concept were adopted in some social studies curriculum projects, Bijl's proposal had little impact. For, by this time, the tide had turned. After World War II, the power of education to produce civilized personalities became questionable. In Germany, where educationists had to find a way of living with their own past, Critical Pedagogy was developed in the sixties and seventies as a variant of *Bildung* theory that is more aware of its societal position (Miedema and Wardekker 1997). In the Netherlands, however, the impact of this theory was limited. Rather, a beginning cultural hegemony of the United States had already led to the "discovery" and adoption of American curriculum theory, which was based on an approach adapted from the natural sciences. To some extent, it had a precursor in the person of Philip A. Kohnstamm. It is important to note that Kohnstamm was a close friend of Langeveld. Both educational theorists were strongly against experimental methods in the human sciences. Kohnstamm, a natural scientist by training, but also theologian, banker, politician, and educationist, had considerable influence in the thirties and even after the war, especially by publications and his relation with Langeveld. In his theoretical outlook, he was a representative of the "first wave" of theology-inspired philosophers, but due to his training as a scientist, he had a strong interest in promoting the use of empirical research to improve educational practice. Thus, he was one of the first educationists to understand the value of empirical research, even though he emphasized that research in the human sciences needed different (interpretative) methods—a warning that had little impact as long as Langeveld's phenomenology was the dominant methodology (Bos 2011).

The "new" curriculum theory was just about everything Bildung theory was not: it was empirical, down-to-earth, transmission-oriented, rather more sensitive to the "needs of contemporary society," and maybe most importantly, closer to the "common sense" about education, which was still dominated by the empiricist view inherited from the nineteenth century; or maybe we should say that this empiricism had finally found an academic legitimation. Moreover, it concentrated on the curriculum as a planning document and its construction, not on education as a whole. In one important respect, however, it resembled

the "old" theory: its idea of curriculum structure was also predominantly based on academic subjects. However, even here there are two important differences. Formerly, the subjects were seen as capable of inducing personality formation by means of their *Bildungsgehalt;* now, the subjects were valued because of the specific knowledge and skills they contain, which must be transmitted to the pupils. Also, while in the old paradigm the emphasis was on the legitimization of curriculum content, this was now seen as an area for politics rather than human science, and researchers concentrated on theories of teaching and learning—on the "how" rather than on the "what."

This changing outlook on the proper subject of academic curriculum theory is demonstrated by the CURVO project, carried out by Langeveld's successors in Utrecht University. The CURVO project took place in the department of education, chaired by professor Jelle Sixma, who was one of Langeveld's PhD students and assistant professors (Bos 2011). The aim of this project was to devise an empirically founded procedure for the development of curriculum documents. The CURVO strategy has been implemented and evaluated in schools for primary and secondary education (De Kok-Damave 1980; Terwel 1984). Inspired by American curriculum theorists like Tyler, Schwab, and Walker, the CURVO group held the view that curricula cannot be prescribed (as to concepts, aims, content, and criteria) by scientists. In their view, curriculum development was a matter of deliberation and choice in a group in which teachers, curriculum specialists, experts in learning and instruction, and evaluation experts work together. This line of curriculum thinking, development, and research is still vivid in the Netherlands and became interwoven with computer-supported approaches for designing educational programs (Nieveen1997). It is typical not only of scientific caution in making value-laden decisions, but also of the penchant for compromise in a situation where no official body has final authority over the curriculum. However, nowadays the National Institute for Curriculum Development does not restrict itself to formal strategies and computer programs for curriculum development. The institute also takes the lead in the national educational discussion on the concepts, aims, and content of the curriculum of the future, for example, in mathematics (Boswinkel and Schram, 2011).

For a while, attempts were made, for instance, by Langeveld's student Leon Van Gelder, to integrate the "old" and "new" points of view; but these attempts were doomed to fail, on the one hand because of the totally different views of the task, scope, and methods of scientific work related to education, and on the other hand because of the sheer number of researchers working within the new "empirical" paradigm: for while the old paradigm had been the nearly exclusive domain of educationists, the new one was introduced by, and attracted mainly, research-oriented psychologists (like De Groot and Meuwese) concentrating on learning theory, and sociologists (e.g., Van Heek, Vervoort, Meijnen, and Jungbluth) whose main topic was inequality of access and results. De Groot, basing himself on earlier work of test psychologist Luning Prak, intended to create a science in which testing and assessment rather than the "subjective" judgments of teachers would provide objective grounds for social justice. In the universities, this led to the establishment of a new "interdisciplinary" field of educational studies, in which the position of those educationists that tried to maintain a more philosophical and anthropological point of view quickly became marginalized, and the emphasis was on the instrumental side of education.

It was mainly from this position that in the seventies, under a social democrat government intent on eradicating class differences in education, a number of large curriculum projects were launched. The common goal of these projects was to create a curriculum that would raise the achievements of low-SES children to the level of other children. Most of these projects did show some effects in the expected direction. However, the retention of the results of learning over a long time was disappointing. In the most prestigious one, based on rather strict prescriptions for teachers, no long-term effects could be found (Slavenburg 1989). A side effect was that such large-scale projects came to be considered as too big a risk, both financially and in terms of their results, and were discontinued—a development which also tied in with a diminishing political will to regulate such things "from above" and the ascendance of the idea that schools themselves should be made accountable for their results.

The mainstream of research and theory in the Netherlands since that time has followed international developments, and at this moment is not very different from that in the United States, with an emphasis on cognitivist-constructivist models of learning and teaching. Curriculum theory and research in the mainstream may be said to be "internationalized." In an important product of this work, the *Handboek Curriculum* by Nijhof et al. (1993), curriculum theory is explicitly said to be based on the American example. This form of "internationalization" is also evidenced by the fact that universities now require educational researchers to publish in international (read: English language) journals rather than in Dutch ones. Another sign of this internationalization may be found in the political decision, mentioned earlier, to base the pedagogical structure of the last years of secondary education on the model of self-regulated learning, which by itself is certainly not a Dutch invention.

An interesting aspect of this last development is that in the concept of self-regulated learning, although it may be seen to result from the development of the cognitive tradition in psychology, a theme returned that was central in the first period: that of the development of personality. It is certainly no accident that the theme of personality or personal identity is now rather popular in educational theories. The condition of late modernity implies that individuals need to make many more life choices than before, and making and entertaining such commitments has become

a major life task. This situation points to the necessity and the problems of personality formation. However, while in the Bildung paradigm this was seen as a primarily moral development made possible by the civilizing influence of culture (as represented by the subject matter), in the cognitivist paradigm it reduces to the more technical version of self-monitoring of motivation and emotions in the service of the ongoing acquisition of knowledge and skills (cf. Prawat 1998). The moral side of personality development has here become a separate issue, an issue that was much discussed for a time following an initiative of the Minister of Education to pay more attention to the task of the schools in moral development—an initiative that may have been primarily inspired by the influx of people from other cultures, which was seen as a threat. This discussion, however, although it led to some interesting curriculum innovations like obligatory school-based community participation, nowadays also tends to transform itself into a more technical emphasis on what are called "twenty-first century skills" like flexibility, creativity, and communicative and cooperative skills (Boswinkel and Schram 2011). While this forms a distinct improvement on the stance of those who want to restrict education to "basic" knowledge-based skills and content, it also tends to sideline the discussion on the moral side (the "for what") of citizenship education.

Although, then, for a time it looked like theoretical developments in educational psychology that depart significantly from the traditional views on teaching and learning would be implemented, this movement turned out to be not well backed by politics or even by most teachers and schools. Also, it is an open question why self-regulated learning was introduced; it may well be that the (for bureaucrats) most alluring factor was the promise of higher effectivity at equal or lower costs. Generalizing somewhat, this leads us to a remark on the position of educational researchers.

The "freedom of education" we spoke about earlier has consequences for the position of curriculum theorists, researchers, and developers. In most cases, they do not feel that they are working either for or against the state; rather, they are working in the space opened up by the principle of relative noninterference, helping to create better conditions for the schools to fulfill their mission. (It should be noted here, however, that teacher education takes place in separate institutions, mostly outside the universities; researchers do not have a teacher education task.) This has been especially true in the seventies, when the state was (ostensibly?) engaging in a proactive policy for creating equal educational opportunities for all. Much of educational research in the Netherlands is state funded, but that does not imply that it has to be in line with current government policies—even though it is frequently perceived to be so by practitioners. However, the mainstream models of educational theory and research, with their emphasis on exactness and predictability, on outcomes rather than on processes, lend themselves more easily to bureaucratic use and control than other models of teaching and learning; so that it can be said that since this model became dominant, researchers work, if not for or against specific political or departmental policies, then often in the service of the educational bureaucracy. This may be one more form the Dutch tendency toward compromise takes.

At this moment there is, as in other countries, a contrast between two tendencies in research. One, backed by the government, emphasizes evidence-based practices where "evidence" is considered strongest if obtained in a randomized control group design; the other looks for "practice-based evidence" in design-based research (Van den Akker, et al., 2006).

We want to end this section by noting that a "reconceptualization" of curriculum thinking, as advocated in the United States by Pinar, has not found many adherents in the Netherlands, probably because it is perceived in a way as too reminiscent of the "outmoded" paradigm of *Bildungstheorie.* However, there are areas of overlap with the social constructivist paradigm, a way of thinking that does have proponents, as will become clear in the next sections.

Curriculum and Content: The Case of Mathematics In order to do justice to the whole picture of curriculum theory and practice in the Netherlands, the role of subject matter and subject matter specialists needs to be mentioned (Freudenthal 1973, 1991; Gravemeijer 1994; Van der Sanden, Terwel, and Vosniadou 2000; La Bastide-van Gemert 2006; Boswinkel and Schram, 2011). The most important theorist of mathematics education in the twentieth century was Hans Freudenthal (1905–1990). His theory of "mathematics as a human activity" integrates ideas from "reformpedagiek," the level-theory of Pierre van Hiele and mathematical content. Freudenthal was a professor of mathematics at Utrecht University and the founder of what is now called the Freudenthal Institute. Although Hans Freudenthal rarely, if ever, referred to his sources of inspiration, it is obvious that he was strongly influenced by the educational philosophy of John Dewey and by the educational theorist Martinus Langeveld (Langeveld 1960; Bos 2011). Freudenthal's point of departure was "mathematics as a human activity": a humanistic conception of man in which the freedom of students and teachers is crucial. In his vision, all students should get the opportunity to really understand mathematics at their own level. He pleaded for learning in small, cooperative groups of mixed ability. His main question was how mathematics originates under the guidance of a good teacher. He saw "originating" as contrary to "imposing" mathematics as a ready-made system. The latter he called the "antididactic inversion" (Freudenthal, 1973, pp. 102–103). His unique contribution lies in the integration of these general ideas with his vision of mathematics as an educational task. Freudenthal's more practical-oriented publications clearly reflect the ideas of the progressive education movement (Reformpedagogiek). His ideas were dominant not only in mathematics education but more general in the exact

sciences. Freudenthal's role in the reform of mathematics education had gained almost mythical proportions (La Bastide-van Gemert 2006). However, nowadays Freudenthal's legacy is under heavy fire, and this is to some extent exemplary for educational reform in the Netherlands to which we will turn in the last part of this section.

In various university departments (mathematics, languages, history, etc.) in the Netherlands, subject matter specialists play an important role in theorizing and developing curricula. These groups often have direct working relationships with teachers, teacher educators, and curriculum developers. As a consequence, their curriculum work is content-oriented and practical. And there is often some tension between these groups and the general curriculum theorists in the departments of education. However, some groups maintain strong relationships with both the practice of teaching and the theory of curriculum, learning, and instruction. Curriculum thinking and development in mathematics in the Netherlands is a successful example.

In the recent history of curriculum concepts in mathematics, as in most other disciplinary subjects, three "long waves" may generally be discerned as "answers" to the traditional approach: the "structure of the curriculum" approach, "mathematics in real-life contexts," and a constructivist approach in mathematics education. Already in the nineteen-sixties Dutch teachers of mathematics were aware of the failures of traditional mathematics education, with its emphasis on the transmission of knowledge and the process of explanation by the teacher, as well as its accent on "basics": algebraic equations, calculations, and drills (cf. De Miranda 1966). At that time, a new curriculum movement, called "New Math," swept across Western countries. This movement may be considered an example of the "structure of the discipline approach." In the context of the New Math movement, however, the "structure of the discipline approach" never became very popular in the Netherlands.

Instead, the traditional approach of the nineteen-fifties gradually changed into a curriculum wave that can be characterized by its basic concepts "guided reinvention" and "mathematics in real-life contexts." At that time, it was popularized under the banner "mathematics for all and everyone," of which Hans Freudenthal was the principal proponent in the Netherlands. Freudenthal defended his vision of "mathematics as a human activity," against advocates of the "structure of the discipline approach" and was strongly opposed to the New Math movement, with its introduction of sets, relations, and logic; a position similar to that of Wagenschein in Germany. For Freudenthal, New Math was "transmission of mathematics as a system," divorced from its context. He highly valued the process of mathematization rather than the results of the process. He and his coworkers in the Freudenthal Institute consequently embraced the idea of mathematics in real-life contexts (Terwel 1990; Terwel, Herfs, Mertens, and Perrenet 1994; La Bastide-van Gemert 2006). These ideas were later brought together under the new acronym RME (Realistic Mathematics Education).

More and more, RME has become related to constructivism. Consequently, in the eighties a new wave in the innovation of the Dutch mathematics curriculum emerged: mathematics education from a constructivist perspective. This was, in a sense, a remarkable development because Freudenthal himself was strongly opposed to constructivism (and any other form of educational "ism") and considered it an empty philosophy and poor developmental psychology (Freudenthal 1991). The main problem for him was the lack of clarity, or the lack of consensus on what constructivism is. He reacted to this lack of clarity by introducing his own terms: (re-)construction, (re-)creation, and (re-)invention. However, Freudenthal was inspired by traditional European conceptions of education and learning as expressed by, for example, Decroly, Wagenschein, Langeveld, Selz, Kohnstamm, Vygotsky, and Piaget. Phenomenology, European versions of cognitivism, and Progressive Education (reformpedagogiek) were important sources for Freudenthal's conception of the mathematics curriculum. The same holds true for his central concept of "guided re-invention" in which the "re" refers to the history of mankind (Freudenthal 1973). This clearly echoes Dewey, who not only mentioned that "reinvention" should be oriented at the history of mankind, but also stressed that reinvention has to be guided by the expert. Although he rarely referred to these sources explicitly, Freudenthal may be considered in a sense a constructivist *avant la lettre.* This connection with European curriculum traditions is the main reason why it was comparatively easy for Freudenthals coworkers and, more in general, Dutch mathematics educators to relate to the constructivist movement. Gravemeijer, at that time one of the leading researchers in the Freudenthal Institute, expressed the relation between realistic mathematics education and constructivism as follows: "The central principle of constructivism is that each person constructs his or her own knowledge, and that direct transfer of knowledge is not possible. This idea of independent construction of knowledge supports the central realistic principle" (Gravemeijer 1994; Gravemeijer and Terwel 2000).

Sometimes there was opposition from inside mathematics and the mathematics-education communities to the basic idea that students should proceed from the real world to the mathematical world. The main criticism of the RME approach is that it is often impossible to proceed from everyday-life situations to "mathematics." Re-invention, in this view, is a waste of time (Verstappen 1994, Keune 1998). The group around Gravemeijer, however, has gone more and more in the direction of social constructivism, in which every theory about the world is considered one of many possible theories that will equally well describe a certain state of the world. The choice between such theories is considered to be a social choice, made for reasons of efficiency in actions, or in some instances for reasons of power. This way of thinking, for which in mathematics education Cobb and his colleagues (Cobb and Bowers 1999) may be considered the leaders, implies that students

should be made aware of the fact that there are multiple solutions for a given problem, that they are able to think of some solution themselves, and only then be shown why and in what cases the "canonical" solution of mathematics might be the best one. There is a clear connection here to the sociocultural approach to curriculum, which will be considered in the next section.

At the level of the formal curriculum, innovation in mathematics education may be said to have been successful. There are new examination programs and curricula for the full range of the general streams in secondary education in the Netherlands. The principles of Realistic Mathematics Education (RME) have to some extent been integrated into all published mathematics methods. With regard to the operational curriculum, mathematics education is at a transitional stage. Many of those involved have noticed a lack of systematic evaluation and support for the way teachers have translated innovation into concrete actions. Except for some well-conducted experimental studies into curriculum implementation and effects (The Royal Netherlands Academy of Arts and Sciences KNAW 2009), it is still unknown how lessons in real school practices are being modeled according to the new ideas. It therefore remains partly an open question whether Stoller's description and prediction will come true when he said that Wagenschein and Freudenthal are laughed at because of their idealism and because they don't fit in with any bureaucratic model and are forgotten when it comes to real classroom practices (Stoller 1978).

Since 2012, there has been a strong movement in the Netherlands against progressive education, RME, constructivism, and what is called "New Learning" (Goetheer and Van der Vlugt 2008; Van de Craats and Verhoef 2009). Proponents of this critical movement can be found in political parties, among educational policy makers, in educational administration, in institutes for teacher education, and in universities. Their main argument is that both in primary and secondary education, mathematical achievement is declining as a consequence of realistic math education. Proponents of RME fight back by saying: Forty years of working on better math education thrown on the scrapheap? No way!

In order to bring clarity to this discussion, the Royal Netherlands Academy of Arts and Sciences KNAW (2009) conducted a meta-analysis of high quality empirical studies into the effects of RME. The outcome of this analysis was clear: there is no evidence from empirical research that this approach is less effective than more traditional strategies with standard procedures and algorithms. However, the critique on RME is part of the more general critique of education in the Netherlands (Goetheer and van der Vlugt 2008). And in a recent policy letter from the Cultural Planning Bureau (CPB) it was stated that the scores of Dutch students, especially the top students, are declining as compared to their counterparts in other countries. The CPB recommends the following measures: "back to the basics," improvements in teacher education, accountability, and early selection of students (Van der Steeg, Vermeer, and Lanser 2011). Looking back over a period of 50 years, it must be said that all attempts to overcome the traditional division between the general and the vocational curriculum have failed. Van Gelder's quest for the middle school and Freudenthal's credo of "mathematics for all" seem forgotten by the policy makers and curriculum designers of today.

The Reception of Vygotsky's Legacy As may have become clear from the mathematics example in the last paragraph, the field of curriculum studies in the Netherlands is currently not of one mind. Next to the neo-humanist and empirical-scientific strands of theory, a third form has developed, more humanist in its principles than the "new" empiricist paradigm, but more oriented towards research and the development of educational practice than the "old" *Geisteswissenschaftliche* way of thinking, deriving its basic ideas from Vygotsky and (lately) Dewey. In a sense, the work of the above-mentioned Kohnstamm may also have provided some leads for this movement. For although he was in favor of empirical research, he opposed various elements of the empirical educational psychology of his day, especially the idea that intelligence was one capacity of which the magnitude was fixed genetically. Taking the German *Denkpsychologie* as a point of departure, he showed that IQ could be boosted by adequate education. This led him to promote forms of education in which understanding, not memorizing, was central. Understanding could be reached by giving students the opportunity to relate curriculum content to a context of practices in daily life. This principle was expressed in a rather influential method for reading in which understanding of the text was central. Training what would now be called problem-solving strategies in reading was essential to his method. But for Kohnstamm, understanding was not the ultimate aim: he saw all education as ultimately contributing to the personal development of all students, as opposed to the mere intellectualism that he discerned in the stance of other educationalists of his time.

Elements of Kohnstamm's thinking are visible in the work of several later educationists and prepared the ground for an arrival of Vygotskian theory that was rather earlier than in most other countries outside the Soviet Union. Vygotsky's work was made known in the sixties through the efforts of Van Parreren (who studied with Kohnstamm) and Carpay, who translated and adapted parts of his work and especially that of his follower Galperin for use in teacher education. Their initial emphasis was on the conditions for transfer (cf. Van Oers 2000). This work was widely used in the education of primary school teachers and thus formed the beginning of a number of developments. One of these can be discerned in primary education, where "developmental teaching" (also known, if related to the first stage of primary education, as "basic development") along Vygotskian lines is now a well-known approach that about 200 schools for primary education use, at least for the earlier years, and which is being constantly developed by the school consultancy center *De Activiteit* (cf. Van Oers 2012). An emphasis in this work is on bridging the gap between "playing" and

"learning" (cf. Van Oers 1999). It has to be noted, however, that in the present political climate, these schools, like many progressive schools, are under constant pressure to conform to standard procedures of testing and curriculum delivery.

A second development is taking place in educational sciences, where theory development and research have realized a connection to the international community of cultural-historical research in education (ISCAR) and where now also the similarities between this theory and the ideas of John Dewey are being explored, although the number of adherents to this paradigm remains small, and cognitive constructivism remains the dominant paradigm into which some of Vygotsky's ideas become integrated. Whereas Van Parreren's interpretation stayed close to the cognitivist paradigm, with a strong emphasis on problem-solving strategies, recent developments have gone in the direction of a theory in which many of the themes of Bildung theory are revived but also transformed. This is perhaps to be expected given the common roots of both paradigms in late nineteenth century European philosophy. Thus, the contribution of education in personality development (cf. Wardekker 1998) is a research theme, as well as the differences and similarities between the home and the school as contexts for learning and the importance of engaging the pupils' motivation. An important difference, however, is that motivation is no longer sought in a mysterious force, *Bildungsgehalt,* that is in the subject matter itself; instead, motivation is related to the pupils being able to connect subject matter to their own participation in societal practices (cf. Van Oers 2000). In this connection it is interesting to note that Bijl's idea of an analysis of life tasks as the foundation for the curriculum was echoed recently in a proposal to connect the curriculum to "life areas" instead of academic subjects (Meijers and Wijers 1997). Also, Freudenthal foresaw an essential, practical role for mathematics in everyone's life (La Bastide-van Gemert 2006). Elements of this way of thinking can be found in recent work in the mathematics curriculum by the Freudenthal Institute, as we noted above. This paradigm, among other things, thus gives an impetus to re-opening the discussion on curriculum content and its function, as the "reconceptualization" did for the curriculum field in the United States.

Internationalization of the Curriculum? We have noted that curriculum theory and research in the Netherlands have always been internationally oriented, although the international research communities that it was connected to have differed according to the paradigm that was selected. An interesting question, which we cannot go into here, would be why it is that in the last century, French thought on curriculum issues has had virtually no impact in the Netherlands, even though some important documents were translated?

In a sense, the same international orientation can be found in the curriculum itself, at least in its explicit part. Foreign languages have always been seen as important, for instance. Still, present conditions require a much more intrinsic form of questioning the national identity that is also undoubtedly part of the curriculum background.

These conditions, part of the changes occurring in late modernity, can be summarized as constituting processes of simultaneous globalization (resulting in forms of greater unity) and localization (resulting in diversity and plurality). These processes most visibly express themselves in, on the one hand, the tendency towards a unified Europe and the freer movement of persons across it, and on the other hand, in the confrontation of cultures and values resulting from this tendency and from the influx of immigrants. Another such process is the secularization of society, which in the Netherlands, with a social organization based on religious differences, has especially far-reaching consequences.

At the moment, those aspects of these processes that are seen as threatening to the social order receive most attention. A fear of degeneration of values has inspired the government to ask schools to give more attention to their task in moral and citizenship education (Wardekker 2001). The coming of children from other cultural communities is seen as a problem rather than as an opportunity. Discussion concentrates on the problem that most of them do not know the Dutch language, which is then countered by the demand that schools become more effective in teaching them. The number of those who see the educational value of plurality of views and values is still small, and multiculturality in this sense is not much of an issue in educational thinking. The concept of a "European identity," although promoted by the European organizations, does not yet seem to be a significant part of the curriculum either.

This situation has a broader background. Questions of internationality and multiculturality, along with all other questions of curriculum content, are viewed by the dominant empiricist paradigm as belonging in the realm of politics, not of academic inquiry. Academic educationists mostly concentrate on issues of effectivity and of learning theory. However, there is no national debate (or anything like it) on the contents of curriculum either. This seems to be one area in which a revival of continental European thinking, either in the form of *Bildungstheorie* or of the newer and more promising approach of sociocultural theory, could be beneficial. If that happens, the pendulum might swing back from an emphasis on document construction to understanding the curriculum as a contribution to the pupils' life course—while not abandoning, of course, the attention to teaching practice and to the problem of inequality in education, for which we have the empirical paradigm to thank.

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Notes

1. Didaktik, originally as opposed to Methodik, the theory of handling classroom situations, although Klafki later abolished this distinction; confusingly, what Klafki called Methodik is often called didaktiek in Dutch.

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